INTRODUCTION

The U.S. Global Change Research Program (USGCRP) coordinates research across 13 federal agencies (Figure 1) to understand the human-induced and natural processes that influence the total Earth system: the atmosphere, oceans, land, water, ecosystems, and people. USGCRP emphasizes research that can be used to answer critical questions about large-scale forces of change in the Earth system, and how the United States and the world can respond to reduce exposure to climate-related risks, protect public health, and strengthen economic and community vitality. The Program was established by Presidential Initiative in 1989 and mandated by Congress in the Global Change Research Act (GCRA) of 1990.1

What is global change?

The term "global change" means changes in the global environment (including alterations in climate, land productivity, oceans and other water resources, atmospheric chemistry, and ecological systems) that may alter Earth's capacity to sustain life.

USGCRP builds on a foundation of decades of federal investment in research and development to ensure that the United States is a world leader in global change research. Through USGCRP, member agencies work together to align research investments with national needs, maximize efficiencies in federal scientific programs, strengthen the nation's innovation base, and deliver products mandated by the GCRA, including the quadrennial National Climate Assessment. USGCRP's mandate also involves promoting international coordination on global change research, including providing support for activities relating to U.S. participation in international scientific assessments, and advancing U.S. leadership in global change science (see Supporting International Global Change Science).

The Fiscal Year (FY) 2020 edition of USGCRP's annual report to Congress, Our Changing Planet, presents highlights of the Program's recent achievements, as well as a summary of agency expenditures under USGCRP's budget crosscut (see Budgetary Information), as required by the GCRA. USGCRP's scope includes but is not limited to the range of agency programs implemented with funds included in the budget crosscut, and the efforts described in this document represent only a small subset of the overall accomplishments of the Program. The highlighted activities represent interagency collaborations that rely on coordinated investments of two or more member agencies. Note that single agency investments, including many that enable interagency accomplishments, are not typically covered in this annual report. See Appendix I. USGCRP Member Agencies for more detail on the principal focus areas related to global change research for each member agency.

Figure 1: U.S. Global Change Research Program Member Agencies



Department of Agriculture



Department of Commerce



Department of Defense



Department of Energy



Department of Health and Human Services



Department of the Interior



Department of State



Department of Transportation



Environmental Protection Agency



National Aeronautics and Space Administration



National Science Foundation



Smithsonian Institution



U.S. Agency for International Development